

WHAT IS CLAIMED IS:

- Sub
A27
1. An electrochemical test strip comprising:
 - (a) a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer; and
 - (b) a reagent composition present in each of said reaction zones.
 2. The electrochemical test strip according to Claim 1, wherein said test strip comprises from 2 to 25 reaction zones.
 3. The electrochemical test strip according to Claim 1, wherein each of said reaction zones houses the same reagent composition.
 4. The electrochemical test strip according to Claim 1, wherein at least two of said reaction zones house different reagent compositions.
 5. The electrochemical test strip according to Claim 1, wherein each of said reaction zones has its own fluid ingress channel to provide for fluid communication between said reaction zone and the external environment of said test strip.
 6. The electrochemical test strip according to Claim 1, wherein at least two of said reaction zones have fluid ingress channels that merge to produce a single ingress channel to provide for fluid communication between said reactions zones and the external environment of said test strip.
 7. The electrochemical test strip according to Claim 1, wherein at least one of said reagent compositions is a redox reagent system.
 8. The electrochemical test strip according to Claim 1, wherein said redox reagent system comprises at least one enzyme and a mediator.
- Sub
B17

LifeScan Ref: LFS-110

9. The electrochemical test strip according to Claim 8, wherein said at least one enzyme includes an oxidizing enzyme.

10. The electrochemical test strip according to Claim 9, wherein said oxidizing enzyme is a glucose oxidizing enzyme.

11. The electrochemical test strip according to Claim 1, wherein at least one of said electrodes comprises a metal selected from the group consisting of: gold, palladium, silver, iridium, carbon, platinum, nichrome, doped indium tin oxide and stainless steel.

12. The electrochemical test strip according to Claim 11, wherein said electrode comprises gold or palladium.

13. The electrochemical test strip according to Claim 1, wherein each of said reaction zones has a volume ranging from about 0.1 to 10 μ l.

14. The electrochemical test strip according to Claim 1, wherein said reference electrode is a gold electrode.

15. The electrochemical test strip according to Claim 1, wherein said working electrode is a palladium electrode.

16. The electrochemical test strip according to Claim 1, wherein said strip is present in a meter.

17. A method of determining the concentration of an analyte in a physiological sample, said method comprising:

(a) applying said physiological sample to an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference

LifeScan Ref: LFS-110

electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones;

(b) detecting an electrical signal in said reaction zone using said metallic electrodes; and

(c) relating said detected electrical signal to the amount of said analyte in said sample.

18. The method according to Claim 17, wherein said analyte is glucose.

19. The method according to Claim 18, wherein said redox reagent system comprises a glucose oxidizing enzyme.

20. The method according to Claim 17, wherein said method comprises employing a meter.

20. A kit for use in determining the concentration of an analyte in a physiological sample, said kit comprising:

(a) an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones.; and

(b) at least one of:

(i) a means for obtaining said physiological sample; and

(ii) an analyte standard.

²²
21. The kit according to Claim ²¹20, wherein said means for obtaining said physiological sample is a lance.

²³
22. The kit according to Claim ²¹20, wherein said kit further comprises a meter.

²⁴
~~23.~~ A system for use in determining the concentration of an analyte in a physiological sample, said system comprising:

(a) an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones.; and

(b) a meter.

²⁵
~~24.~~ The system according to Claim ²⁷~~23~~, wherein said system further comprises a means for obtaining said physiological sample.

²⁶
~~25.~~ The system according to Claim ²⁷~~23~~, wherein said system further comprises an analyte standard.